



Fall Asphalt Conference

VDOT Specifications Update:

Traffic Engineering & Work Zone

VanLoan Nguyen, P.E.
Traffic Engineering Division
October 8, 2013

Traffic Engineering Specifications Oversight Areas

Division VII

- Section 700 – General
- Section 701 – Traffic Signs
- Section 702 – Delineators
- Section 703 – Traffic Signals
- Section 704 – Pavement Markings & Markers
- Section 705 – Lighting Systems

Other Divisions

- Section 238 – Electrical & Signal Components
- Section 246 – Pavement Markings Materials (jointly w/ Materials Div)
- Section 247 – Reflective Materials (jointly w/ Materials Div)
- Section 512 – Maintaining Traffic

Stakeholders Engagement

- **Stakeholders Partnering:**

- **VDOT**

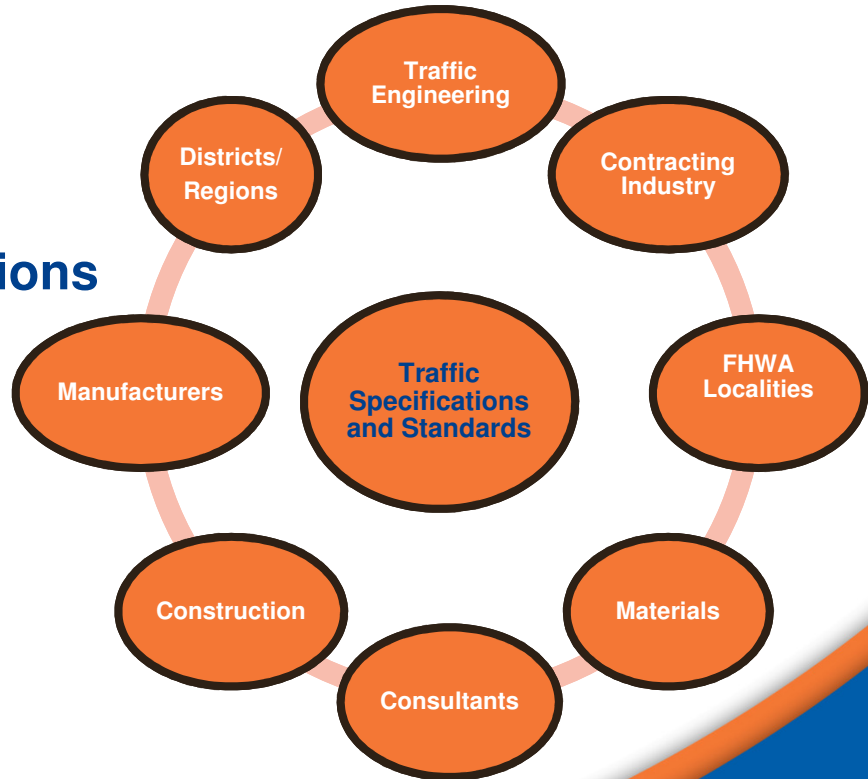
- ✓ **Materials, Construction, L&D, S&B, Maintenance, Operations, OPO, Safety, Districts, Regions, VCTIR, Chief Engineer, Deputy CE**

- **Industry**

- ✓ **Contractors, Manufacturers, Consultants, Industry Associations**

- **Partner Agencies**

- ✓ **FHWA, Localities**



Outreach Efforts

- ✓ Conducted 4 Contractor & Manufacturer Industry Workshops
- ✓ On-going Reviews with Consultant & Industry representatives
- ✓ On-going Internal Reviews with VDOT Partners
- ✓ Conceptual discussions with FHWA to reduce approval time

Continuous engagement of Internal & External partners

- ✓ Safety
- ✓ Mobility
- ✓ Efficiency
- ✓ Cost Effectiveness

Traffic Engineering Technical Areas Update

- **Special Provisions - 2014 Paving Schedules :**
 - No changes planned at this time
- **Specifications - Division VII Traffic Control Devices & Section 512 Maintaining Traffic :**
 - Industry Comments have been extremely helpful
 - Sections 238, 512 & 700 through 705 being finalized with Construction
- **Standards - Revisions to Supplement Specification:**
 - DRAFT Standards to the Industry for comment by Spring 2014
- **Virginia Supplement to the MUTCD - Revision 1:**
 - Effective: projects issued for Bid on or after Jan. 1, 2014
 - On-Line: Changes are editorial, additional clarification & improved guidance

Technical Summary

➤ Work Zone – AFAD, Rumble Strips, TMA, Signals

- **Specification additions to improve safety for workers and motorist on two-lane roadways:**
 - ✓ **Automated Flagger Assistance Device (AFAD)**
 - ✓ **Temporary Portable Rumble Strips**
- **Specification provides clearer directions on the documentation needed for Truck Mounted Attenuator (TMA)**
 - ✓ **Additional weight may be added to the TMA support vehicle based on Manufactures' recommendations**
 - ✓ **Copy of original weight ticket shall be kept in support vehicle**
 - ✓ **Copy of Self-Certification**
- **Establish consistent processes for traffic signal maintenance & operation responsibilities during construction**
- **Strengthening plan design requirements for temporary signals**

Technical Summary - Cont'

➤ General Signs

- The 2014 Standards will offer expanded Sign Post and Foundation options for Temporary and Permanent Signing
- Specification changes to improve sign visibility for motorist on portable supports at interchanges, intersections & turn lanes

➤ Traffic Structures

- Structural requirements updated for Signal, Overhead Signing and Roadway Lighting to comply with AASHTO 2010/2012

➤ Signals

- Specifications cover more signal products → increase the number of products on VDOT Preapproved list → streamlined product approvals during construction

Technical Summary - Cont'

➤ Markings

- Added installation deviation limits for pavement markings on tangent (1/4") and curves (1/2") as agreed in last review meeting
- Payment for MOT during testing of suspect areas will be permitted
- Add guidance to Standards for crossing joints and how to offset markings from joints
- Use of Type F/G Paint for specific construction applications will be added
- Section 704 will continue to evolve

➤ Guide Rails

- Improving consistency in GR engineering assessment format for ease of No-Plan project development
- Reducing unnecessary replacement of GR
- NOVA seen 15% cost savings last year in GR budget

Continuous Improvements

- Advance Technologies - to improve project development and operations during construction & maintenance activities
 - ✓ Cameras/video detection technologies to minimize in-pavement loops
 - ✓ Testing adaptive traffic signal - major construction (US 17 York Co.)
 - ✓ Mobile Applications for field engineering work/inspection data
- Signal, Communications & Lighting Utility Locating - evaluate improvements to VDOT processes for underground signal, communications & lighting utility marking in advance of digging
- Markings Systems - Updating guidelines & performance specs; Evaluating research recommendations for implementation.
- Others - Work Zone lighting, Limitations of Work Hours, Alternative Routings, WZ Performance Measures, Safety Edge



Please Wake Up ... Van is finally done with her presentation ... Trenton has been dying to turn off the microphone!!

QUESTIONS???

TED Contacts:

➤ **TED Assistant Division Administrator**

✓ Vanloan.Nguyen@VDOT.Virginia.gov

➤ **Coordination of TCD Specs & Standards**

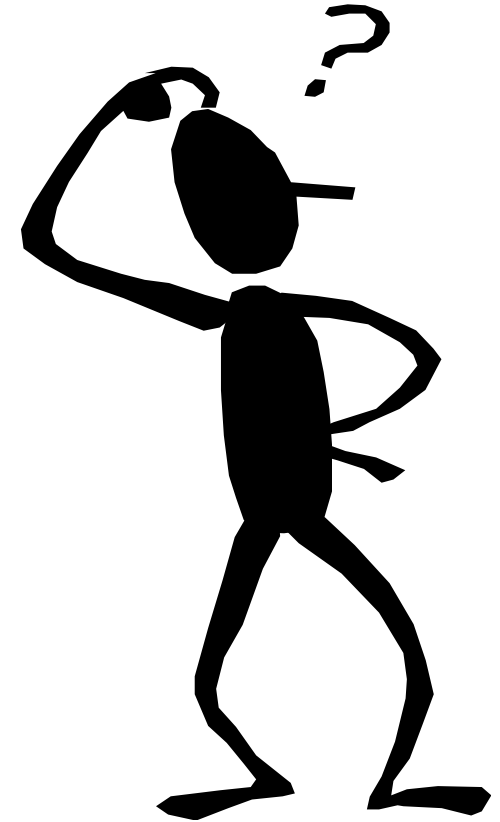
✓ Harry.Campbell@VDOT.Virginia.gov

➤ **Temporary Traffic Control - General**

✓ David.Rush@VDOT.Virginia.gov

➤ **Temporary Traffic Control - Traffic Signals**

✓ Don.Robbins@VDOT.Virginia.gov



Traffic Engineer
Answers